Panasonic
ideas for life

HD Fixed Dome Network Camera

WV-SF335

Preliminary

HD/1,280 x 960 H.264 Fixed Dome Network Camera

Key Features

- 720p HD images up to 30 fps
- Newly developed 1.3 Megapixel high sensitivity MOS Sensor
- Multiple H.264 (High profile) streams and JPEG streams ensure simultaneous real time monitoring and high resolution recording by "UniPhier®", Panasonic's proprietary System LSI platform.
- Full frame (Up to 30 fps) transmission at 1,280 x 960 image size
- Wide Dynamic Range and ABS (Adaptive Black Stretch) technologies deliver wider dynamic range compared with conventional cameras.
- Face Wide Dynamic Range technology ensures clear face image.
- H.264 and MPEG-4 are selectable for system migration.
- High sensitivity with Simple Day/Night function : 0.3 lux (Color), 0.2 lux (B/W) at F1.3 (Wide)
- Focus Assist ensures easy installation.
- Digital Noise Reduction: 3D-DNR ensures noise reduction in various conditions.
- Progressive scan ensures clear images with less motion blur and no tearing even when the subject is moving.
- Superior color reproduction by primary (RGB) color filter
- Electronic sensitivity enhancement: Auto (Up to 16x) / OFF
- Selectable light control modes: Outdoor / Indoor / Fixed electronic shutter
  Outdoor / Indoor: Electronic shutter and ALC lens iris control are automatically controlled depending on the mode and luminance level.
  Fixed electronic shutter: Up to 1/10,000 fixed electronic shutter can be selectable.
- VMD (Video Motion Detector) with 4 programmable detection areas, 15 steps sensitivity level and 10 steps detection size
- Face detection function detects the position of human face and the information is sent by XML or video stream.
- Meta data for VMD is supplied to work with the WJ-ND400 playback VMD function.
- Privacy Zone can mask up to 2 private areas, such as house windows and entrances/exits.
- 2x, 4x digital zoom controlled by browser
- Camera title display: Up to 20 alphanumeric characters on the browser, Up to 16 alphanumeric characters embedded in the image
- Alarm sources including 1 terminal input, VMD and Panasonic alarm command can trigger actions such as SDHC/SD memory recording, FTP image transfer, E-mail notification, Indication on browser, Alarm terminal output, and Panasonic protocol output.
- Full duplex bi-directional audio allows interactive communication between camera site and monitoring site.
- JPEG image compression ratio can be changed by alarm so that higher quality image can be provided.
- Prioritized stream control: One of the video streams can be prioritized when multiple recorders or client PCs are accessing the camera so that the recorder or the client PC can maintain the frame rate.
- SDHC/SD Memory card slot for manual recording (H.264 / JPEG), alarm recording (H.264 / JPEG) and backup upon network failure (JPEG)
- H.264/MPEG-4 max. bit rate/client and Total bit rate control allows flexible network traffic management. Frame rate priority mode controls bit rate and compression ratio to provide the specified frame rate.
- Alarm log, Manual REC log, FTP error log saved in the SDHC/SD memory card is displayed on the browser GUI and can be downloaded to the client PC. Playback or Image data download through the log is also available.
- Internet mode: H.264/MPEG-4 images can be transmitted over HTTP protocol.
- Multi-language GUI and setup menu: English, French, Italian, Spanish, German, Russian (PAL) / English, French (NTSC)
  * Installation required except for English
- IPv4/IPv6 protocol supported
- Analog Monitor output for easier installation
- 2.8 mm ~ 10 mm, 3.6x Varifocal Auto Iris lens

Standard Accessories

• CD-ROM ..... 1 pc.	The followings are for installation.
• Installation Guide ..... 1 pc.	• Power Cable Plug ..... 1 pc.
• Code Label ..... 1 pc.	• External I/O Cable Plug ..... 1 pc.
	• Template for installation ..... 1 pc.
	• Cable tie ..... 2 pcs. (incl. a spare tie)

Optional Accessories

Embedded Ceiling Mount Bracket	Smoke Dome Cover	Ceiling Mount Bracket
WV-Q168	**WV-CF5S**	**WV-Q105** (PAL only)

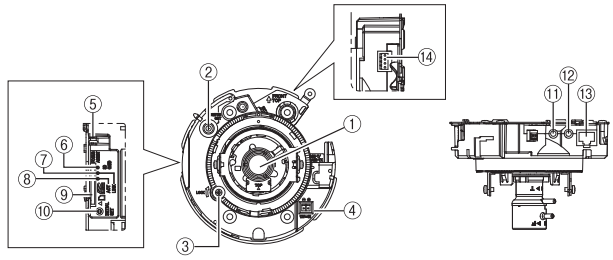
Specifications

TV System			NTSC	PAL
Camera	Image Sensor		1/3 inch MOS Sensor	
	Effective Pixels		Approx. 1.3 megapixel	
	Scanning Mode		Progressive scan	
	Scanning Area		4.8 mm (H) x 3.6 mm (V)	
	Minimum Illumination		Color: 0.3 lux, B/W: 0.2 lux at F1.3 (Shutter: 1/30 s, AGC: High), Color: 0.019 lux, B/W: 0.013 lux at F1.3 (Shutter: 16/30 s, AGC: High)	
	White Balance		AWC (2,000 ~ 10,000 K), ATW1 (2,700 ~ 6,000 K), ATW2 (2,000 ~ 6,000 K)	
	Light Control Mode		Outdoor : Automatic integration of ALC and ELC Indoor [50 Hz]: Automatic integration of ALC and ELC (up to 1/100 sec.) Indoor [60 Hz]: Automatic integration of ALC and ELC (up to 1/120 sec.)	
	Shutter Speed		Fix shutter: OFF (1/30), 3/100, 3/120, 2/100, 2/120, 1/100, 1/120, 1/250, 1/500, 1/1,000, 1/2,000, 1/4,000, 1/10,000	
	Wide Dynamic Range		ON / OFF	
	Face Wide Dynamic Range		ON / OFF (Only at Wide Dynamic Range: ON)	
	Adaptive Black Stretch		ON / OFF (Only at Wide Dynamic Range: OFF)	
	AGC		ON (LOW, MID, HIGH) / OFF	
	Electronic Sensitivity UP		OFF / AUTO (Max. 2x (2/30 s), 4x (4/30 s), 6x (6/30 s), 10x (10/30 s), 16x (16/30 s))	
	Simple Day/Night Mode		AUTO / OFF	
	Digital Noise Reduction		High / Low	
	Video Motion Detection		4 areas, Sensitivity: 15 steps, Detection size: 10 steps	
	Privacy Zone		Up to 2 zones, Gray	
	Camera Title (OSD)		Up to 16 alphanumeric characters	
	Focus Adjustment		Focus Assist	
Lens	Vari Focal Length		2.8 mm ~ 10 mm, 3.6x varifocal	
	Angular Field of View		H: 27.7° (Tele) ~ 100.3° (Wide), V: 20.8° (Tele) ~ 73.5° (Wide)	
	Maximum Aperture Ratio		1 : 1.3 (Wide) ~ 1 : 3.1 (Tele)	
	Focusing Range		0.3 m ~ ∞	
Adjusting Angle			Horizontal: 180° (clockwise), 170° (counter clockwise) Vertical: ±75°, Imaging tilt adjustment range: ±100°	
Browser GUI	Camera Control		Brightness, AUX ON / OFF	
	Display Mode		Spot, Quad: Image from 16 cameras can be displayed in 4 different Quad screens or 16 split screen (JPEG only). 20 characters camera title available.	
	Digital Zoom		1x, 2x, 4x controlled by browser GUI	
	Camera Title		Up to 20 alphanumeric characters	
	Clock Display		Time: 12H/24H, Date: 5 formats on the browser, Summer time (Manual)	
	Alarm Control		Reset	
	One Shot Capture		A still picture will be displayed on a newly opened window.	
	Audio		Mic (Line) Input: ON / OFF Volume adjustment: Low / Middle / High, Audio Output: ON / OFF Volume adjustment: Low / Middle / High	
	SD Memory Data Download		Still or motion Images recorded in the SDHC/SD memory card can be downloaded.	
	GUI/Setup Menu Language		English, French (Installation required for French)	English, French, Italian, Spanish, German, Russian (Installation required except for English)
	System Log		Up to 100 (Internal), Up to 4,000 (SDHC/SD memory when the recording format is set to JPEG.) error logs	
	Supported OS		Microsoft® Windows® 7 Professional 64 bit/32 bit, Microsoft® Windows Vista® Business SP1 32 bit, Microsoft® Windows® XP Professional SP3 The language of the OS must be same as selected GUI language.	
	Supported Browser		Windows® Internet Explorer® 8.0 32 bit (Microsoft® Windows® 7 64 bit/32 bit), Windows® Internet Explorer® 7.0 (Microsoft® Windows Vista® Business SP1 32 bit), Microsoft® Internet Explorer® 6.0 SP3 (Microsoft® Windows® XP Professional SP3)	
Network	Network IF		10Base-T / 100Base-TX, RJ-45 connector	
	Image Resolution *1 *2	Aspect ratio: [4 : 3]	H.264: 1,280 × 960 / VGA (640 × 480) / QVGA (320 × 240), up to 30 fps MPEG-4: VGA (640 × 480) / QVGA (320 × 240), up to 30 fps JPEG: 1,280 × 960 / VGA (640 × 480) / QVGA (320 × 240), up to 30 fps	
		Aspect ratio: [16 : 9]	H.264: 1,280 × 720 / 640 × 360 / 320 × 180, up to 30 fps JPEG: 1,280 × 720 / 640 × 360 / 320 × 180, up to 30 fps	
	H.264/ MPEG-4 *1	Transmission Mode	Constant bitrate / Framerate priority	
		Frame Rate	1 / 3 / 5 / 7.5 / 10 / 15 / 20 / 30 fps	1 / 3 / 5 / 7.5 / 10 / 12 / 15 / 20 / 30 fps
		Bit Rate/ Client	64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 1,536 / 2,048 / 3,072 / 4,096 / 8,192* kbps / Unlimited * H.264 mode only	
		Image Quality	LOW / NORMAL / FINE	
		Refresh Interval	0.1 fps ~ 30 fps	
		Transmission Type	UNICAST / MULTICAST	
	JPEG	Image Quality	10 steps	
		Transmission Type	PULL / PUSH	
	Audio Compression		G.726 (ADPCM) 32 kbps / 16 kbps	
	Audio Mode		OFF / Mic (Line) input / Audio output / Interactive (Half duplex) / Interactive (Full duplex)	
	Authentication for Audio		Level 1 only / Level 2 higher / All users	
	Total Bit Rate		64 / 128 / 256 / 384 / 512 / 768 / 1,024 / 2,048 / 4,096 / 8,192 kbps / Unlimited	
	Supported Protocol		IPv6: TCP/IP, UDP/IP, HTTP, RTP, FTP, SMTP, DNS, NTP, SNMP IPv4: TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, FTP, SMTP, DHCP, DNS, DDNS, NTP, SNMP	
	FTP Client		Alarm image transfer, Periodic image transfer, Active/Passive selectable (When the FTP periodic transmission is failed, backup on an optional SDHC/SD memory card is available.)	
	No. of Simultaneous Users		Up to 14 users (Depends on network conditions)	

TV System		NTSC	PAL
Network	SDHC/SD Memory Card (Option)	H.264 recording: Manual REC / Alarm REC (Pre/Post) JPEG recording: Manual REC / Alarm REC (Post) / Backup upon network failure Compatible SD (SDHC) card: Panasonic 256 MB, 512 MB, 1 GB, 2 GB, 4 GB*, 8 GB*, 16 GB*, 32 GB* model * SDHC card	
	Face Detection	ON / OFF (with XML notification)	
Alarm	Alarm Source	1 terminal input, VMD, Command alarm	
	Alarm Actions	SDHC/SD memory recording, E-mail notification, Alarm terminal output, Indication on browser, FTP image transfer, Panasonic protocol output	
	Alarm Log	With SDHC/SD memory card: 5,000 logs, without SDHC/SD memory card: 1,000 logs	
	Schedule	Alarm / VMD / Access permission	
Input/ Output	Monitor Output (for adjustment)	1.0 V [p-p] / 75 Ω, NTSC composite, RCA Jack	1.0 V [p-p] / 75 Ω, PAL composite, RCA Jack
	Microphone/Line Input	MIC IN and Line IN are selectable. ø3.5 mm stereo mini jack (monaural input) (Applicable microphone; Plug-in power type) Supply voltage: 2.5 V ±0.5 V input impedance: approx. 2 kΩ	
	Audio Output	ø3.5 mm stereo mini jack (monaural output) Line level	
	External I/O Terminals	ALARM IN, ALARM OUT, AUX OUT	
General	Safety/EMC Standard	UL (UL60065), FCC (Part15 ClassA), C-UL (CAN/CSA C22.2 No.60065), DOC (ICES003 ClassA)	CE (EN55022 ClassB, EN55024)
	Power Source and Power Consumption	12 V DC: 280 mA, PoE (IEEE 802.3af): 3.5 W	
	Ambient Operating Temperature/Humidity	–10 °C ~ +50 °C (14 °F ~ 122 °F), 90 % or less (without condensation)	
	Dimensions	ø129.5 mm x 93 mm (H) (ø5-1/8" x 3-5/8" (H))	
	Weight (approx.)	370 g (0.82 lbs.)	

*1 H.264 and MPEG-4 are alternative. *2 [4 : 3] and [16 : 9] are alternative.

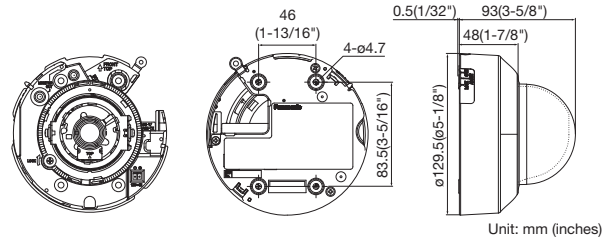
Part Names and Functions



① 3.6x Variable Focal Lens
② Monitor for Adjustment Output Connector
③ Panning Table Lock Screw
④ 12 V DC Power Cable Terminals
⑤ Focus Assist Button
⑥ SDHC/SD Memory Card Error Indicator / Focus Assist Indicator
⑦ Link Indicator
⑧ Access Indicator
⑨ SDHC/SD Memory Card Slot
⑩ INITIAL SET Button
⑪ Audio Output Connector
⑫ Microphone/Line Input Connector
⑬ Network Connector (RJ-45)
⑭ External I/O Terminals

* Due to space limitation, the connector of the audio cable and network cable should be within 30 mm (1-3/16") from the connector of the camera.

Appearance



Unit: mm (inches)

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Important
– Safety Precaution: carefully read the operating instructions and installation manual before using this product.
– Panasonic can not be responsible for network performance and/or other manufacturer products that reside on the network.

- All TV pictures are simulated.
- Weights and dimensions are approximate.
- Specifications are subject to change without notice.
- These products may be subject to export control regulations.
- All product pictures are NTSC models.

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